

10/587679

(A)P12 Rec'd PCT/PTO 27 JUL 2006

ENGLISH TRANSLATION OF AMENDMENT UNDER ARTICLE 34

PCT/JP2005/1210

TOYOTA BOSHOKU KABUSHIKI KAISHA et al.

Claims

1. (Amended) A headrest controller for moving part or whole of a headrest of a vehicle seat toward a head of a passenger to reduce a distance between the headrest and the head in the horizontal direction by predicting or detecting a crash to a rear of the vehicle, characterized by including:

a head position detecting unit for detecting a predetermined state of approach or state of contact of the headrest to or with the head during a movement of a headrest; and

a control circuit for stopping the headrest based on a detection signal from the head position detecting unit;

wherein the head position detecting unit includes a sensor for detecting the predetermined state of approach and a sensor for detecting the predetermined state of contact and the control circuit stops the headrest based on a detection signal from either of the sensors which has output a detection signal earlier in time.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Amended) A headrest controller as in claim 3, characterized in that the head position detecting unit has a plurality of sensors of at least either sensor type among sensor type for detecting the predetermined state of approach and sensor type for detecting the state of contact.

6. (Canceled)

7. A headrest controller as in claim 5, characterized in that the head position detecting unit is provided in the front part of the headrest.

8. (Amended) A headrest controller comprising:
a crash detecting sensor for predicting or detecting a crash to a rear of a vehicle;

a headrest driving mechanism for moving part or whole of a headrest of a vehicle seat toward a head of a passenger to reduce a distance between the headrest and the head in the horizontal direction;

a head position detecting unit for detecting that the headrest has entered a predetermined state of approach or state of contact to or with the head; and

a control circuit for operating the headrest driving mechanism when the crash detecting sensor outputs a detection signal and stopping the headrest driving mechanism when the head position detecting unit outputs a detection signal;

characterized in that:

the head position detecting unit includes a sensor for
detecting the predetermined state of approach and a sensor for
detecting the state of contact; and

the control circuit stops the headrest when the
predetermined state of approach or state of contact is detected
by either of the sensors.

9. (Canceled)

10. (Canceled)

11. A headrest controller as in claim 8, characterized in that:

the crash detection sensor is a sensor for predicting a crash to the rear of the vehicle; and

the control circuit is configured to return the headrest to an initial position by operating the headrest driving mechanism in the opposite direction when a predetermined time passes after the crash detecting sensor outputs a detection signal.

12. (Canceled)

13. (canceled)